

On derivations of low-dimensional complex Leibniz algebras.

Abstract

This paper deals with the low-dimensional cases of Leibniz algebras' derivations. We give an algorithm to find the derivation algebras. Then the algorithm is applied to find the basic derivations of Leibniz algebras. The characteristically nilpotency of Leibniz algebras has also been studied. The results are given in the form of tables.

Keyword: Characteristically nilpotent leibniz algebra; Derivation; Nilpotent derivation.